

R E M A R K S

It is respectfully requested that the Examiner enter and consider the changes made in the claims which are indicated in the Listing of Claims set forth in Appendix I attached to this paper. Relative to the version of claims previously before the Examiner, Claims 8 to 15 have been canceled, and Claim 1 has been amended to include the elements of Claim 10.

It is respectfully submitted that the changes effected in the claims cannot be deemed to necessitate further search since applicants' merely revised Claim 1 to present the subject matter of Claim 10 in independent form. Claims 2 to 6 which remain pending depend upon Claim 1. Also, as will be addressed more specifically in the following, the Examiner's reasons for finding applicants' claims unpatentable are not deemed to be applicable where Claims 1 to 6 as herewith presented are concerned. Favorable action is respectfully solicited.

The Examiner rejected Claims 1 to 3, 8, 10 and 12 to 15 under 35 U.S.C. §102(b) as being anticipated by the teaching of *Pees et al.* (WO 98/46608) asserting that the reference disclosed compositions comprising kresoxim-methyl in combination with phytotoxic agrochemicals including, e.g., herbicides.²⁾ Applicants respectfully disagree.

Anticipation under Section 102 can be found only if a reference shows exactly what is claimed, i.e., all material elements of the invention as claimed must be found in one prior art source,³⁾ the elements must be shown in the reference in as much detail as is contained in the claim,⁴⁾ and the elements must be shown in the reference in the part-to-part relationship which is set forth in the claim.⁵⁾ It is respectfully urged that the teaching of *Pees et al.* at least fails to show the elements of applicants' method in the part-to-part relationship and in the detail set forth in applicants' claims.

2) Office action page 2, lines 17 to 21.

3) Cf. *In re Marshall*, 577 F.2d 301, 198 USPQ 344 (CCPA 1978); *In re Kalm*, 378 F.2d 959, 154 USPQ 10 (CCPA 1967).

4) Cf. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989).

5) Cf. *Lindemann Maschinenfabrik v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

The teaching of **Pees et al.** pertains to certain fungicidal triazolopyrimidine compounds,⁶⁾ which may be applied in form of compositions comprising "other compounds having biological activity, e.g. compounds having similar or complementary pesticidal activity or compounds having plant growth regulating, fungicidal or insecticidal activity."⁷⁾ Further, **Pees et al.** enumerate certain fungicidal compounds, including kresoxim-methyl, as illustrative for fungicides which may be admixed with the triazolopyrimidines.⁸⁾ Even assuming arguendo that the section may be considered to suggest a combination of particular active compounds, such a combination could, at best, be a mixture of the fungicidal triazolopyrimidine (I) of **Pees et al.** with anyone of the illustrative fungicidal compounds. As such, the respective section of the reference clearly cannot be deemed to suggest a method in which a fungicide such as kresoxim-methyl is applied in conjunction with a herbicide. The respective section, therefore, cannot be deemed to describe the elements of applicants' invention in the part-to-part relationship which is set forth in the claims.

Pees et al. also mention that co-formulations "may contain at least one compound of formula I [i.e., the triazolopyrimidine fungicide] and any of the following classes of biological control agents such as viruses, bacteria, nematodes, fungi, and other microorganisms which are suitable to control insects, weeds or plant diseases or to induce host resistance in the plants. Examples of such biological control agents are: *Bacillus thuringiensis*, *Verticillium lecanii*, *Autographa californica* NPV, *Beauveria bassiana*, *Ampelomyces quisqualis*, *Bacillus subtilis*, *Pseudomonas chlororaphis*, *Pseudomonas fluorescens*, *Streptomyces griseoviridis* and *Trichoderma harzianum*."⁹⁾ This section clearly pertains to combinations of the triazolopyrimidine with certain micro-organisms and cannot be deemed to even suggest or imply a method in which a compound corresponding to applicants' formula (I) is employed in conjunction with a herbicidal crop protection product to increase the resistance of plants to the phytotoxicity of the herbicide. This section of the reference, therefore, also clearly fails to describe the elements of applicants' invention in the detail and the part-to-part relationship which is set forth in the claims.

6) Cf. page 1, indicated lines 2 to 5, of **WO 98/46608**.

7) Cf. page 16, indicated lines 10 to 13, of **WO 98/46608**.

8) Cf. page 17, indicated line 7 to 32, of **WO 98/46608**.

9) Cf. page 18, indicated lines 1 to 9, of **WO 98/46608**.

In light of the foregoing it is respectfully urged that the subject matter of applicants' claims is neither anticipated, nor rendered obvious, by the teaching of **Pees et al.** Favorable reconsideration of the Examiner's position and withdrawal of the rejection under Section 102(b) is respectfully solicited.

Further, the Examiner rejected Claims 1 to 3, 6 and 8 to 15 under 35 U.S.C. §102(b) as being anticipated by the teaching of **Müller et al.** (**US 6,159,992**). However, it is respectfully urged that the reference also cannot be deemed to describe the elements of applicants' claims in the detail and part-to-part relationship which is necessary to support a finding of anticipation.

The teaching of **Müller et al.** pertains to a fungicidal mixture comprising synergistically effective amounts of a carbamate fungicide falling within the realm of applicants' formula (I) and a certain anilide fungicide.¹⁰⁾ Additionally, the authors state:¹¹⁾ *"When providing the mixtures, it is preferred to employ the pure active ingredients I and II with which further active ingredients against harmful fungi or against other pests such as insects, arachnids or nematodes, or else herbicidally active ingredients, growth regulators or fertilizers, may be admixed."* It is deemed to be immediately apparent from the emphasized sections of the statement that the combination of the mixture with an active ingredient against pests, or with a herbicidal compound, a growth regulating compound or a fertilizer is merely an option, and not mandatory. The section, therefore, cannot be deemed to show a combination of applicants' compounds (I) with a herbicidal crop protection product in the detail and exactness provided in applicants' claims, and the referenced statement is insufficient to establish anticipation.

Moreover, applicants respectfully disagree with the Examiner's position that the reference is suited to inherently describe the particular effect which is achieved in accordance with the method claimed by applicants.

The express, implicit, and inherent disclosures of a prior art reference may be relied upon in the rejection of claims under 35 U.S.C. 102 or 103. *"The inherent teaching of a prior art reference, a*

10) Cf. col. 1, indicated lines 5 to 42, in conjunction with the art referenced in col. 1, indicated lines 49 and 50, of **US 6,159,992**.

11) Col. 3, indicated lines 5 to 10, of **US 6,159,992**; emphasis added.

question of fact, arises both in the context of anticipation and obviousness."¹²⁾ Also, there is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention. It is, however, required that the subject matter is in fact inherent in the prior art reference.¹³⁾ The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.¹⁴⁾ "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'"¹⁵⁾

The teaching of **Müller et al.** clearly fails to teach a mandatory combination of the carbamate and a herbicide. As such, the effects which are achieved in accordance with applicants' method are, at best, inherent only under certain circumstances, i.e., the effects are not a necessary result when any random embodiment of **Müller et al.**'s teaching is practiced. The reference, therefore, cannot be deemed to inherently disclose the increase of the resistance of plants to the phytotoxicity of a phytotoxic herbicide, which is obtained when applicants' method is practiced.

In view of the foregoing shortcomings, the teaching of **Müller et al.** cannot support a finding that applicants' method is unpatentable under Section 102, or even a finding that the invention claimed by applicants was obvious at the time applicants made the invention. It is therefore respectfully requested that the rejection on the basis of **Müller et al.** be withdrawn. Favorable action is respectfully solicited.

Last but not least, the Examiner rejected Claims 4 and 5 under 35 U.S.C. §103(a) "as being unpatentable over Muller et al. (WO

12) *In re Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995). See also *In re Grasselli*, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed. Cir. 1983).

13) *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003).

14) *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

15) *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted).

98/46608). [sic] in view of Ernst et al. (US 6,541,425),"¹⁶⁾ arguing that "[i]t would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Muller et al. [sic] and Ernst et al. to further include combining formula II as defined in claims 4 and 5 with the phytotoxic agrochemical disclosed by Pees et al."¹⁷⁾ In light of the Examiner's argument applicants assume that the Examiner intended the rejection to be based on the teaching of *Müller et al.* when taken in view of the disclosures of *Pees et al.* and *Ernst et al.*

However, even a combination of all three references is not deemed to establish that the subject matter of applicants' Claims 4 and 5, or of applicants' Claim 1 is unpatentable under Section 103.

In order to render a claimed invention unpatentable under Section 103 the prior art has to be such that the invention as a whole was rendered obvious at the time the invention was made. Where, as here, the claimed invention resides in a particular method, not only the materials used and the nature of the specific process employed but also the particular result which is obtained must be considered when determining whether the claimed method is obvious within the meaning of Section 103.¹⁸⁾ The Examiner's argument that "combining the fungicides as disclosed by Muller et al. [sic] with phytotoxic agrochemicals would be *prima facie* obvious to one of ordinary skill in the art" is therefore not sufficient to establish that applicants' method for increasing the resistance of plants to the phytotoxicity of herbicides was *prima facie* obvious at the time applicants' made the invention.

The Examiner's reference to the Court's holding in *In re Kerkhoven*¹⁹⁾ is also not deemed to support the Examiner's position. The Examiner applied the Court's holding in *In re Kerkhoven* as supporting that it was *prima facie* obvious to combine two compositions each of which was taught by the prior art to be useful for the same purpose in order to form a third composition that is used for the same purpose. On the one hand, it should be appreciated that applicants' claims are not directed to a composition, but relate to a method in which a certain composition is employed to achieve a particular re-

16) Final Office action page 4, lines 12 and 13.

17) Final Office action page 6, lines 1 to 4.

18) *In re Dillon*, 919 F.2d 688, 695, 16 USPQ2d 1897, 1903 (Fed. Cir. 1990) (*en banc*), cert. denied, 500 U.S. 904 (1991).

19) 626 F.2d 846, 205 USPQ 1069 (CCPA 1980).

sult. On the other hand, it is respectfully urged that the method of applicants' invention cannot be deemed to employ the constituents of the combination "for the same purpose" as is addressed in the prior art.

The case before the Court in *In re Kerkhoven* pertained to a process for producing a detergent containing a certain detergent mixture, and the Court specifically noted that the applicant had not shown any unexpected advantages of the process resulting from the combination of the detergents. In contrast to the factual situation in *In re Kerkhoven*, applicants' claims pertain to a method in which a result is achieved which could not reasonably be expected on the basis of the references applied by the Examiner, i.e., increasing the resistance of plants to the phytotoxicity of a herbicidal crop protection product by treating the plants, the soil or seeds with an effective amount of a compound of applicants' formula (I) and the herbicide.

Also, while *Kerkhoven et al.* dealt with detergents, applicants' invention is concerned with a method employing a combination of biologically effective compounds, i.e., a combination of particular fungicidal compounds and phytotoxic herbicidal products, and applicants have found that the combination of the compounds in suitable amounts provides for safening properties. Safening effects are advantageous.²⁰⁾ Moreover, safening effects are generally unpredictable, and neither one of the references suggests or implies that a safening effect may result when the particular compounds specified in applicants' claims are employed in the manner claimed by applicants. The effects which are achieved in accordance with applicants' method, therefore, constitute unexpected advantages. As such, the factual situation in the present case is clearly and significantly different from the situation evaluated by the Court in *In re Kerkhoven*.

As already noted in the foregoing, neither the teaching of *Müller et al.* nor the teaching of *Pees et al.* can be deemed to teach, or inherently disclose, the function or property which characterizes applicants' method. The teaching of *Ernst et al.* does not close or even narrow this gap.

Ernst et al. address particular solid formulations which exhibit a delayed release of one or more active ingredients which can be used

20) Cf. page 3, indicated line 36, to page 4, indicated line 9, of the application.

in crop protection,²¹⁾ i.e., fungicides, herbicides, insecticides, growth regulators and combinations thereof.²²⁾ While the fungicides which are enumerated by **Ernst et al.** as suitable for the delayed release formulations include certain embodiments which fall within the realm of the compounds of applicants' formula (I),²³⁾ numerous other structurally and functionally diverse examples of fungicides are mentioned.²⁴⁾

Although the authors mention the option to combine different crop protection agents the combination of a herbicide and a fungicide is merely one out of numerous choices. Additionally, to arrive at the combination required in accordance with applicants' method, it would be necessary to specifically select one of the embodiments of fungicides which fall within the realm of the compounds of applicants' formula (I). Moreover, it is deemed pertinent to appreciate that **Ernst et al.** specifically address that the delayed release of the formulation is necessary, for example, in the case of active ingredients which are phytotoxic to crop plants.²⁵⁾ As such, the methods involving the application of **Ernst et al.**'s formulations alleviate or obviate any problems of phytotoxicity by controlling the release rate of any phytotoxic agent. The Examiner will note in this context that the reference does not specifically suggest the utilization of any safening ingredients in the delayed release formulations.

As noted, the fact that a certain result or characteristic may result from a given set of circumstances is not sufficient to establish the inherency of that result or characteristic. The teaching of **Ernst et al.** is therefore also insufficient to establish that the method of applicants' invention is inherently disclosed.

Bearing in mind that the particular result which is obtained in a claimed method constitutes an integral part of the invention as a whole which is referenced in Section 103,²⁶⁾ neither the references, each taken alone, nor any combination of the references, can be deemed to render the subject matter of applicants' claims prima facie

21) Col. 1, indicated lines 7 to 18, of **US 6,541,425**.

22) Col. 3, indicated lines 23 to 25, of **US 6,541,425**.

23) Col. 10, indicated line 10, to col. 12, indicated line 30, of **US 6,541,425**.

24) Col. 8, indicated line 31, to col. 10, indicated line 9, of **US 6,541,425**.

25) Col. 1, indicated lines 33 to 44, and col. 19, indicated lines 46 to 48, of **6,541,425**.

26) *In re Dillon*, 919 F.2d 688, 695, 16 USPQ2d 1897, 1903 (Fed. Cir. 1990) (*en banc*), cert. denied, 500 U.S. 904 (1991).

obvious. It is therefore respectfully requested that the rejection under Section 103(a) on the basis of the teaching of *Müller et al.* and/or *Pees et al.* and/or *Ernst et al.* be withdrawn. Favorable action is solicited.

In light of the foregoing and the attached, the subject matter defined in in applicants' claims is deemed to be patentable under the pertinent provisions, and the application is deemed to be in good condition for allowance. Early action by the Examiner is appreciated.